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10/561,261	02/10/2006	Harmannus Franciscus, Maria Schoo	0064.25	5706	
25871 SWANSON &	25871 7590 03/26/2009 SWANSON & BRATSCHUN, L.L.C.			EXAMINER	
8210 SOUTHPARK TERRACE LITTLETON, CO 80120		HO, ANTHONY			
LITTLE TON,	CO 80120		ART UNIT	PAPER NUMBER	
			2815		
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail  $\,$  address(es):

efspatents@sbiplaw.com

## Application No. Applicant(s) 10/561,261 SCHOO ET AL. Office Action Summary Examiner Art Unit ANTHONY HO 2815 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 02 February 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 22-35 and 42-47 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 22-35 and 42-47 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/S5/08)
Paper No(s)/Mail Date \_\_\_\_\_\_.

Interview Summary (PTO-413)
Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

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#### DETAILED ACTION

This is in response to amendment to application no. 10/561,261 filed on February 2, 2009.

Claims 22-35 and 42-47 are presented for examination.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 22-34 and 47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yu et al (US PUB 2002/0017612).

In re claims 22, 34 and 47, Yu et al discloses a detection system having at least one semiconductive electroluminescent active layer, wherein the emission spectrum of the diode exhibits at least two intensity maxima (i.e. the "emitter" with filters enable and define the "maxima." Furthermore, biasing voltage

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determines emission or detection functionality. The intended use or functional language insufficient to distinguish over applied art) and wherein the active layer comprises at least one electroluminescent organic compound (paragraph 0080 – paragraph 0112). Yu et al also discloses a detector (other diodes) in optical communication with the LED (i.e. see Figure 1 and Figure 11). For example, one of the diodes can be used, function, or be labeled, as a signal channel and another diode as a separate reference channel (i.e. see Figure 11) (i.e. and other detectors define a "signal channel" or "reference channel").

The recitation "provides for the simultaneous emission of at least two intensity maxima of different wavelengths of light from the active layer" in the claim specifies an intended use or field of use and is treated as nonlimiting since it has been held that in device claims, intended use must result in a structural difference between the claim invention and the prior art in order to patentably distinguish the claim invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963). A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Furthermore, the recitation "provides for the simultaneous emission of at least two intensity maxima of different wavelengths of light from the active layer" in the

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claim is functional language and is treated as nonlimiting since it has been held that in device claims, the device must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference. See MPEP 2114.

In re claims 23, 24, 27 and 28, Yu et al discloses using one of the listed materials in the semiconductor device (paragraph 0080 – paragraph 0112).

In re claims 25 and 26, the recitation "wherein the at least two different intensity maxima of the different wavelengths are emitted by a first and a second electroluminescent compound" in the claim specifies an intended use or field of use and is treated as nonlimiting since it has been held that in device claims, intended use must result in a structural difference between the claim invention and the prior art in order to patentably distinguish the claim invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. *In re Casey*, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963). A claim containing a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art

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apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Furthermore, the recitation "wherein the at least two different intensity maxima of the different wavelengths are emitted by a first and a second electroluminescent compound" in the claim is functional language and is treated as nonlimiting since it has been held that in device claims, the device must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference. See MPEP 2114.

The recitation "wherein the first compound has a maximum in the emission spectrum at a different wavelength than the second compound" is an inherent property since Yu et al discloses using the same materials as in the present application.

In re claims 29-33, Yu et al shows the emission of at least two intensity maxima and their differences between them (i.e. Figures 15A-15C).

### Claim Rejections - 35 USC § 103

Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu et al (US PUB 2002/0017612) as applied to claim 22 above, and further in view of Dickert et al, "Solvatochromic betaine dyes as optochemical sensor

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materials: detection of polar and non-polar vapors," Sensors and Actuators B, 70, (2000), 263-269.

Dickert et al discloses a suitable coating for polar and non-polar vapors in a sensor device (i.e. Introduction).

The advantage is to optimize the sensor behavior of the sensor device (i.e. Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the detection system as taught by Yu et al with a suitable coating for polar and non-polar vapors in a sensor device as taught by Dickert et al in order to optimize the sensor behavior of the sensor device.

### Response to Amendment

The declaration under 37 CFR 1.132 filed February 2, 2009 is insufficient to overcome the rejection of claims 22-34 and 47 based upon Yu et al (US PUB 2002/0017612) as set forth in the last Office action because: applicant has not established any facts that are commensurate with the scope of the claims and rejection. For example, in paragraph 7 of the declaration under 35 CFR 1.132, applicant states, "[i]f the Yu et al device generated light, it is my opinion that the detector would not be functional." However, since it is applicant's opinion, no fact has been established that the prior cannot generate light. Thus, the Yu et al device is still considered to be capable of generating light and the claimed invention is not patentably distinguishable over the Yu et al device.

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#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY HO whose telephone number is (571)270-1432. The examiner can normally be reached on M-Th: 10:30AM-9:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. H./ Examiner, Art Unit 2815 /Jerome Jackson Jr./ Primary Examiner, Art Unit 2815